

**PATENT COOPERATION TREATY**  
**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
 (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>S05P0028W000</b>	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. <b>PCT/JP2004/019684</b>	International filing date ( <i>day/month/year</i> ) <b>22.12.2004</b>	Priority date ( <i>day/month/year</i> ) <b>07.01.2004</b>
International Patent Classification (IPC) or national classification and IPC <b>G11B7/125, 7/005, 7/135</b>		
Applicant <b>SONY CORPORATION</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising: <ul style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>7</u> sheets, as follows:           <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</li> <li><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</li> </ul> </li> <li>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</li> </ul>

4. This report contains indications relating to the following items:
<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Box No. I Basis of the report</li> <li><input type="checkbox"/> Box No. II Priority</li> <li><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li><input type="checkbox"/> Box No. IV Lack of unity of invention</li> <li><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li><input type="checkbox"/> Box No. VI Certain documents cited</li> <li><input type="checkbox"/> Box No. VII Certain defects in the international application</li> <li><input type="checkbox"/> Box No. VIII Certain observations on the international application</li> </ul>

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/JP2004/019684

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 

This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
 
  - international search (Rule 12.3 and 23.1(b))
  - publication of the international application (Rule 12.4)
  - international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
 

the international application as originally filed/furnished  
 the description:  
 pages 1, 2, 6, 7, 9, 10, 12–15 as originally filed/furnished  
 pages\* 3, 4, 5, 8, 11 received by this Authority on 27.07.2005  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 the claims:  
 nos. 2, 3, 4, 6 as originally filed/furnished  
 nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
 nos.\* 1, 5 received by this Authority on 27.07.2005  
 nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 the drawings:  
 sheets fig. 1–5 as originally filed/furnished  
 sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3.  The amendments have resulted in the cancellation of:
 

the description, pages \_\_\_\_\_  
 the claims, nos. \_\_\_\_\_  
 the drawings, sheets/figs \_\_\_\_\_  
 the sequence listing (*specify*): \_\_\_\_\_  
 any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 

the description, pages \_\_\_\_\_  
 the claims, nos. \_\_\_\_\_  
 the drawings, sheets/figs \_\_\_\_\_  
 the sequence listing (*specify*): \_\_\_\_\_  
 any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

Box No. V	International application No. PCT/JP2004/019684
-----------	--

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
-----------	--

## 1. Statement

Novelty (N)	Claims <u>1–6</u>	YES
	Claims _____	NO
Inventive step (IS)	Claims _____	YES
	Claims <u>1–6</u>	NO
Industrial applicability (IA)	Claims <u>1–6</u>	YES
	Claims _____	NO

## 2. Citations and explanations (Rule 70.7)

Document 1: US 5363363 A (Eastman Kodak Co.), 08 November 1994

Document 2: JP 6-267102 A (Toshiba Corp.), 22 September 1994

Document 3: JP 5-128535 A (Toshiba Corp.), 25 May 1993

Document 4: WO 95/00873 A1 (Philips Electronics N. V.), 05 January 1995

Document 5: JP 63-100647 A (Canon Inc.), 02 May 1988

Claims 1 to 6

Documents 1 to 3, which are cited in the international search report and in the written opinion that was drafted by the international searching authority, disclose optical disk reproduction devices that are equipped with a laser beam source, an optical receiver for reproducing signals, an optical receiver for monitoring the light source and a polarizing beam splitter; therein, said documents also describe the technical concept of using the differential between the output that is obtained from the optical receiver for reproducing signals and the output that is obtained from the optical receiver for monitoring the light source in order to obtain reproduction signals from which the laser noise has been eliminated.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/JP2004/019684

Box No. V      **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

On the other hand, the inventions disclosed in documents 1 to 3 differ from the inventions set forth in the abovementioned claims of the present application in that said documents do not specifically delimit the polarization isolation characteristics of the polarizing beam splitter.

However, it is common practice for a person skilled in the art to arbitrarily adjust the properties of a polarizing beam splitter that is disposed upon the optical path between the light emitting element and the light receiving element of an optical disk recording/reproducing device so as to accommodate the condition of the abovementioned optical path, as is indicated in documents 4 and 5. In particular, documents 4 and 5 describe establishing a suitable transmission factor and a suitable reflection factor relative to the P polarized light and the S polarized light in order to obtain optimal detected values along the abovementioned optical path. Such being the case, it can be said to be natural for a person skilled in the art to select beam splitter settings that impart a suitable transmission factor and a suitable reflection factor relative to the P polarized light and the S polarized light in order to obtain reproduction signals from which the laser noise has been eliminated even when using the inventions disclosed in documents 1 to 3.

Consequently, the present application merely indicates settings that a person skilled in the art would naturally have taken into consideration when using the devices disclosed in documents 1 to 3, and thus the invention set forth in the abovementioned claims does not involve an inventive step.